



[REDACTED]

February 14, 2012

Dear [REDACTED]:

SUBJECT: Analysis Results for Water Supply at [REDACTED],
Humboldt Township, Marquette County, Michigan

The United States Environmental Protection Agency (EPA) collected a sample from your private water supply on November 1, 2011. Attached is a tabulation of the sample analysis results. The EPA sampled your water supply to assess if past activities at the nearby Humboldt Mine and Mill site had affected groundwater and individual water supplies in the area.

The concentrations of inorganic substances and metals detected in the water supply samples were below established federal and state drinking water standards and health concern levels, and were similar to groundwater quality generally found in Central Marquette County. While it is entirely normal within the region, it is noteworthy that manganese was detected at a concentration slightly higher than the secondary drinking water standard, 50 micrograms per liter (ug/l). The secondary standard is not a health-risk standard. It is an aesthetic water quality standard.

The sample from your water supply contained manganese at 50.8 ug/l. Water containing manganese at concentrations above the secondary standard may cause staining of fixtures and laundry, and may have objectionable turbidity, color, and odor.

Even though there is no indication your water supply has been impacted, the EPA and the Michigan Department of Environmental Quality (DEQ) believe a second sample set is needed. The EPA will contact you regarding a second access agreement and sample collection date. Analysis of the follow-up samples will be performed for some inorganic substances not previously researched and for some organic chemicals at a lower laboratory detection limit.

The EPA and the DEQ appreciate your cooperation in these investigations. If you have questions about the sampling efforts, please contact Nuria Muñiz at (312-886-4439). If you have questions about the analysis results, please contact Chuck Thomas, DEQ by phone at 906-346-8534 or by email at thomasc3@michigan.gov.

Sincerely,

Nuria Muñiz
U.S. Environmental Protection Agency
Superfund Division
Region 5, Chicago IL.

Charles H. Thomas, P.G.
Michigan Dept. of Environmental Quality
Resource Management Division
Upper Peninsula District Office

Enclosure

cc: Ms. Dana DeBruyn, DEQ
Mr. Steve Harrington, DEQ
Mr. Patrick L. Jacuzzo, Marquette County Health Dept.
Mr. Don Deblasio, EPA
Mr. Mark Johnson, ATSDR



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The concentrations of inorganic substances and metals detected in the water supply samples were below established federal and state drinking water standards and health concern levels, and were similar to groundwater quality generally found in Central Marquette County. While it is entirely normal within the region, it is noteworthy that iron and manganese were detected at concentrations higher than the secondary drinking water standards. The secondary standard for iron is 300 micrograms per liter (ug/l) and the secondary standard for manganese is 50 ug/l. The secondary standards are not health-risk standards. They are aesthetic water quality standards.

The iron concentration in your water supply samples ranged from 25800 to 26000 ug/l. The manganese concentration ranged from 948 to 953 ug/l. Water containing iron and manganese at concentrations above the secondary standard may cause staining of fixtures and laundry, and may have objectionable turbidity, color, and odor.

Even though there is no indication your water supply has been impacted, the EPA and the Michigan Department of Environmental Quality (DEQ) believe a second sample set is needed. The EPA will contact you regarding a second access agreement and sample collection date. Analysis of the follow-up samples will be performed for some inorganic substances not previously researched and for some organic chemicals at a lower laboratory detection limit.

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The sample from your water supply contained manganese at 122 ug/l. Water containing manganese at concentrations above the secondary standard may cause staining of fixtures and laundry, and may have objectionable turbidity, color, and odor.

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